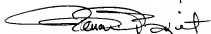


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I hereby certify that this correspondence is being transmitted herewith via the USPTO's Electronic Filing System (EFS-Web) on the date indicated below and is addressed to: **MAIL STOP: AMENDMENT**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Submission: *27 September 2006*



SELENA WHITAKER-PAQUET

Attorney Docket No.: 48000.1003c2u
PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of **Daryl W. Hochman**

Group Art Unit: 1614

Application No. : 10/056,528
Filed : January 23, 2002
For : **METHODS AND COMPOSITIONS FOR TREATING
CONDITIONS OF THE CENTRAL AND PERIPHERAL
NERVOUS SYSTEMS USING NON-SYNAPTIC MECHANISMS**
Examiner : Brian S. Kwon

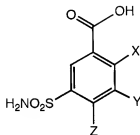
DECLARATION OF DR. JOHN PARTRIDGE

MAILSTOP: AMENDMENT
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

The undersigned, Dr. John Partridge, hereby declares:

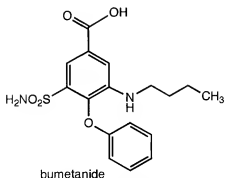
1. I have a Ph.D. in Organic Chemistry and have been working in the field of organic chemistry and specifically pharmaceuticals for over 35 years, including creating the Chemical Development Department at Glaxo Inc. (now GlaxoSmithKline Inc.) in Research Triangle Park, North Carolina. I now have my own consulting business and provide services for several different companies, including the assignee of the subject patent application. I am an inventor on 35 US patents, and have written over 55 peer-reviewed publications and book chapters.

2. Both furosemide and bumetanide are substituted meta-sulfamoylbenzoic acids, with bumetanide being a 3-substituted amino-4-(electron withdrawing moiety)-5-sulfamoylbenzoic acid and furosemide being a 2-substituted amino-4-(electron withdrawing moiety)-5-sulfamoylbenzoic acid. Both compounds have the following general structure:

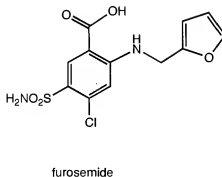


wherein Z is an electron withdrawing substituent.

More specifically, as shown below, in bumetanide: X is H, Y is $\text{NH-CH}_2\text{CH}_2\text{CH}_2\text{CH}_3$ and Z is O-phenyl. In furosemide X is $\text{NH-CH}_2\text{-(2-furanyl)}$, Y is H and Z is Cl.



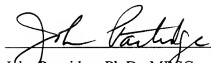
Loevens Kemiske Fabr., US Patent
3,634,583 (January 11, 1972);
Leo Pharmaceuticals, US Patent
3,806,534 (April 23, 1974).



Hoechst, German Patent Application DE 1,122,541
(filed 28 December, 1959); Hoechst, US Patent
3,058,882 (October 16, 1962; filed 28 December,
1959); Strum, K., et al, Chem. Ber., 1966, 99, 328.

Based on the similarities between the structures of furosemide and bumetanide, I would expect them to have similar functional activities, including similar abilities to effectively treat migraine headache and associated symptoms.

3. The undersigned further declares that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful, false statements, and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 35 of the United States Code.


John Partridge, Ph.D., MESC

10 August 2006
Date